Pre-Load Test Evaluation Report - [redacted]

Pre-Load Test Evaluation by Fire Escape Engineers

is an approved member of Fire Escape Services Network

Contact: 800-649-3333 or info@FireEscapeEngineers.com

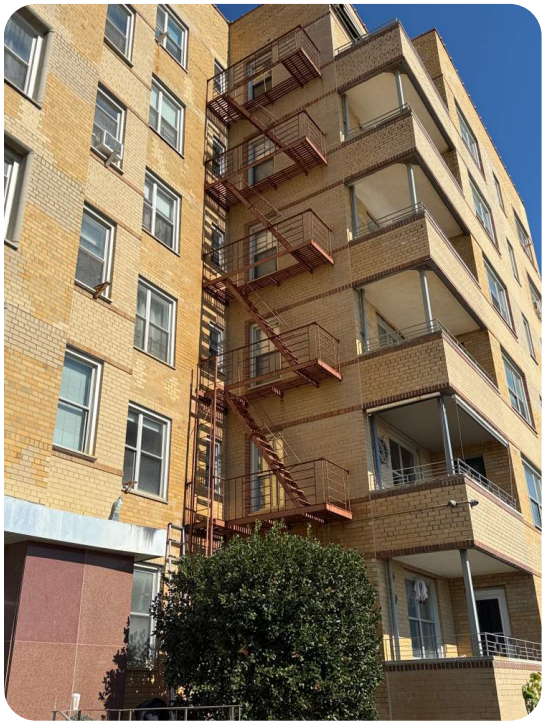
Address: [redacted]

Inspector: FranCisco Meneses

Evaluation Date: 10/22/2025

Building Description: **6**-story **brick** structure with **7** system(s) on the building.

Systems Overview:



System (A1)

is made of painted steel and consists of platforms and stairs with drop ladder to grade.

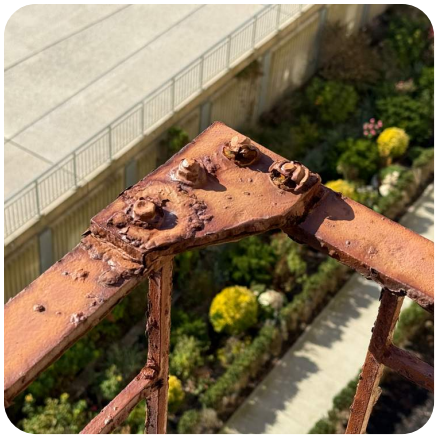
Results: Fail Major

Life Safety Concerns (LSC) & Imminent Safety Hazards (ISH)

Life Safety Concerns on *broken and missing* **treads**

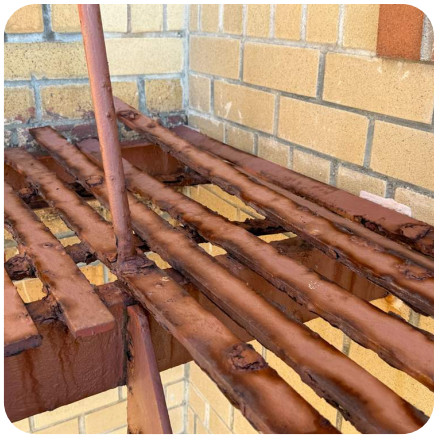
Imminent Safety Hazards on **treads** *with severe material loss*

Supports, stringers, platforms and railings have suspect connections with internal rust, rust jacking, and some material loss.

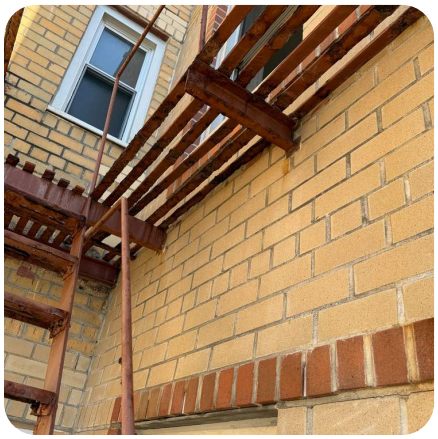


Corroded rail gusset plate connection

Corroded slat connections



Corroded slat connections, detached - trip hazard

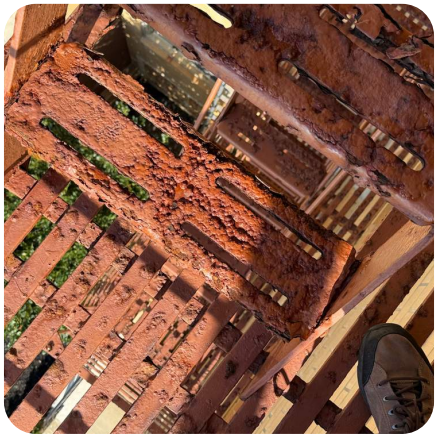


Fair and functional supports, ready for load testing

Corroded Tread - Life Safety

Corroded Tread - Imminent Danger

Corroded Tread - Imminent

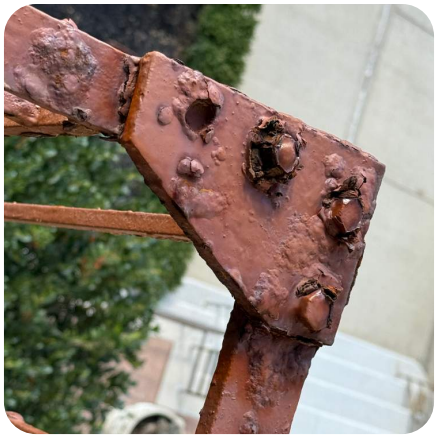


Corroded Tread

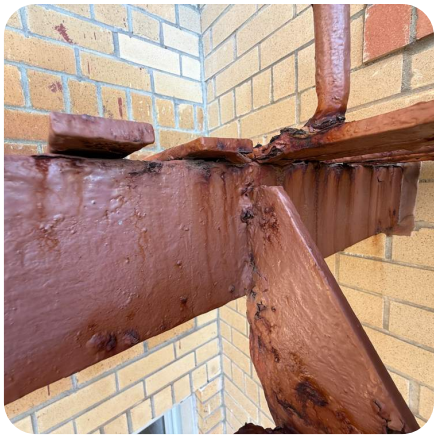
Corroded Tread - Life Safety

Danger

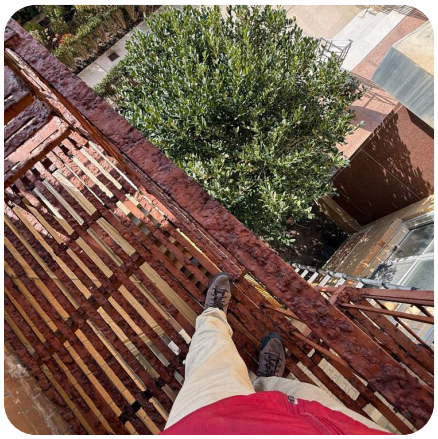
Missing & Corroded Slats - Imminent Danger



Corroded rail gusset plate connection

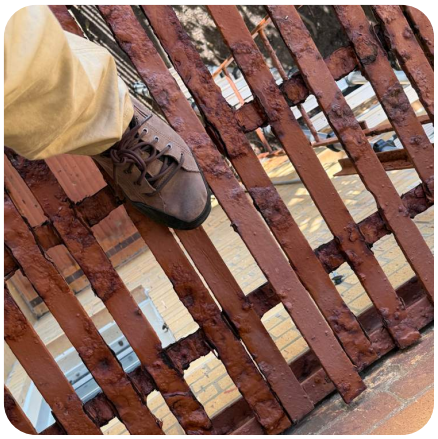


Suspect welded stringer connection. Missing bolted clip connection.

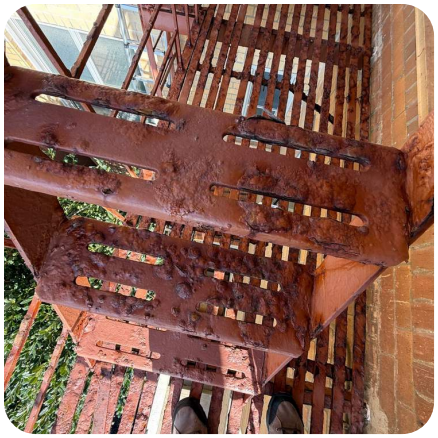


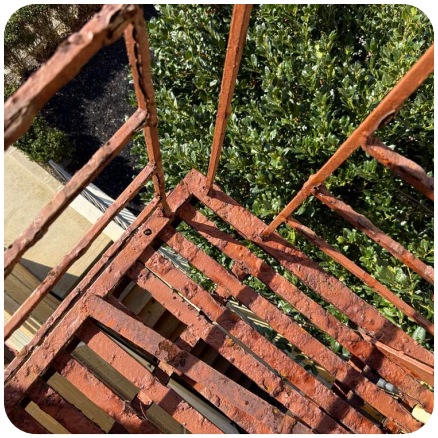
Corroded railings

Ladder's release mechanism suspect with internal rust



Corroded slats, detached connections


Corroded treads


Corroded platforms and rails


Corroded rail gusset plate connection with rust jacking

Components Overview:

1. Structural Summary

Overall Condition:

The fire escape system exhibits significant age-related deterioration. While primary support elements appear generally intact and may be suitable for load testing, several secondary components present severe corrosion, localized failures, and life-safety hazards requiring immediate attention prior to certification.

Supports & Cement:

The embedded C-channel supports are cantilevered into the masonry façade. At the time of inspection, they appeared structurally functional and in fair condition, suitable for load testing. However, evidence of "rust weeping" was observed at multiple embedments, indicative of water intrusion and active corrosion at the interface. Application of a compatible sealant around all embedments is recommended to mitigate continued moisture penetration.

Platforms:

Platform framing consists of flat-bar members spanning between C-channels, with secondary slat reinforcement below. The platform assembly is in **severely distressed condition**, exhibiting advanced corrosion and widespread section loss. Multiple welded connections have failed, resulting in detached or freely movable slats that pose an immediate tripping and fall hazard. Several slats have already dislodged, creating open voids that present **life-safety risks** to building occupants and emergency personnel.

Rails:

The guardrails exhibit widespread corrosion, with evidence of **rust-jacking** at several connection points and blistering of the protective coating throughout. Bolted joints display varying degrees of fastener corrosion and internal rust. All railing connections should be cleaned and resecured with new hardware.

Stringers:

Welded stair stringer connections show evidence of surface and internal corrosion. Reinforcement with **bolted clip plates** or equivalent mechanical fastening is recommended to restore load continuity and provide redundancy.

Treads:

Several stair treads exhibit **severe corrosion and material loss**, with signs of brittleness and flaking under moderate pressure. These conditions constitute a **life-safety hazard and imminent danger** to users. All compromised treads must be replaced prior to any load testing or certification.

Drop Ladder:

The drop ladder was not deployed during the inspection. The upper release mechanism and support hook display minor internal corrosion but appear intact. The assembly is presumed functional but requires operational testing and full surface preparation with a protective coating system.

2. Paint Summary

Overall the paint **Fail: Full paint** on system required before/after repairs. Recommend to power wash and seal all major joints to prevent water intrusion into structural connections.

Fire Escapes must be maintained/painted every 5–7 years as per manufacturer's recommendation.

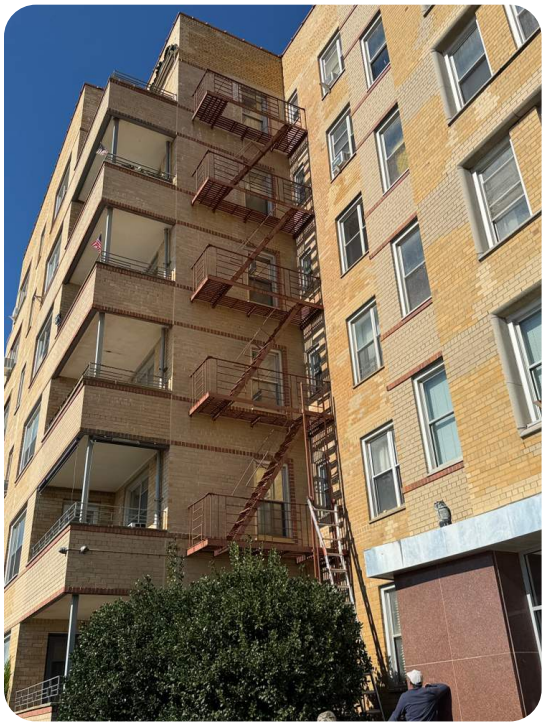
3. Code Summary

Our inspector found some code issues related to AHJ (Authority Having Jurisdiction) or PENC (pre-existing non-conforming) requirements for this Fire Escape system:

1. No Egress Lighting

IFC 1104.16.7 Maintenance. (PAINT REQUIRED)	**Paint - Fail** • Full Paint Required

IFC 1104.16.5.1 Examination. **IFC 1104.16.5 Materials and strength.** **(LOAD TESTING, OTHER EVIDENCE)**	**Structural - Fail Major with Life Safety Concerns & Imminent Safety Hazards** • Connections suspect with internal rust, rust jacking, and some material loss.
IFC: Means of *egress illumination*. **(CODE)**	**Code - Fail** • No Egress Lighting is Present
January 2010 Standard Specification: Miscellaneous & Ornamental Metals — Fire Escapes (Section 5A.10, Paragraph E)	**NO FIELD WELDING is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted).**
NFPA Life Safety Code 101 7.2.8.6.2	AHJ shall approve certification by Load Test or Other Evidence of Strength



System (A2)

is made of painted steel and consists of platforms and stairs with drop ladder to grade.

Results: Fail Major

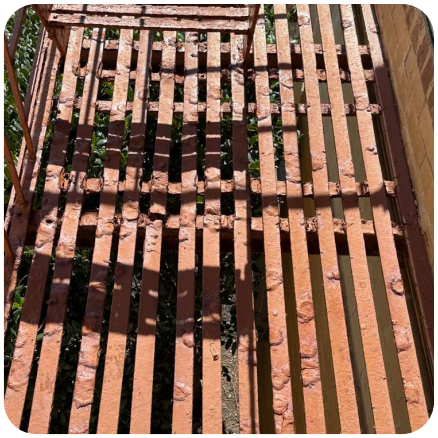
With Imminent Safety Hazards (ISH)

Imminent Safety Hazard concerns on **railings** and **treads** *with rust jacking and material loss.*

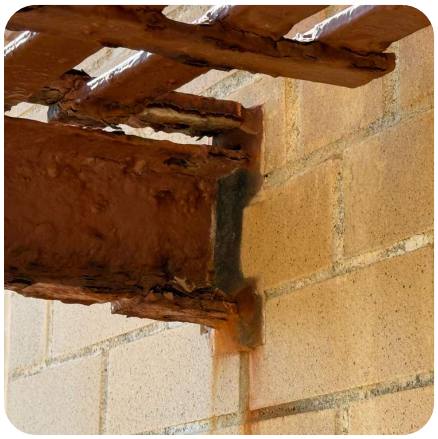
Supports, stringers, platforms and railings have suspect connections with internal rust, rust jacking, and some material loss.

Corroded rail gusset plate connection

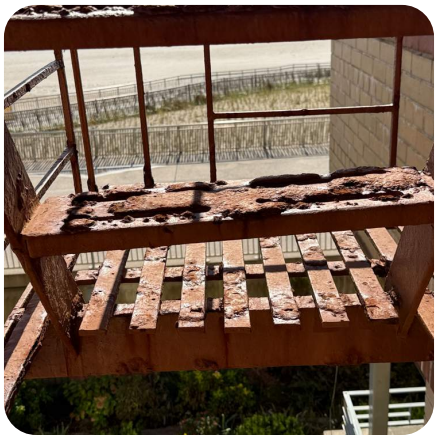
Corroded slat connections



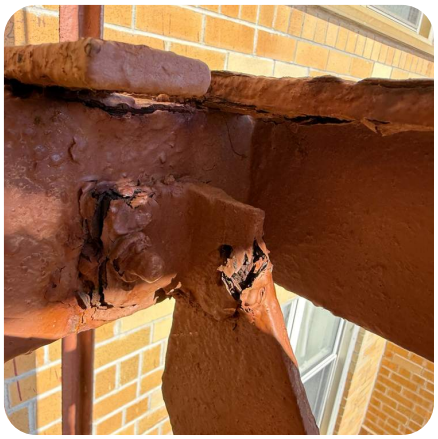
Corroded slat connections, detached - trip hazard



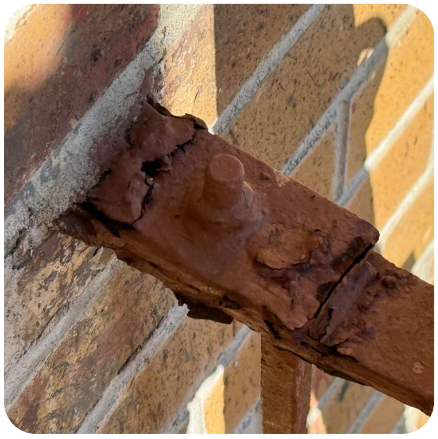
Corroded Support connection



Corroded Tread - Imminent Safety Hazard

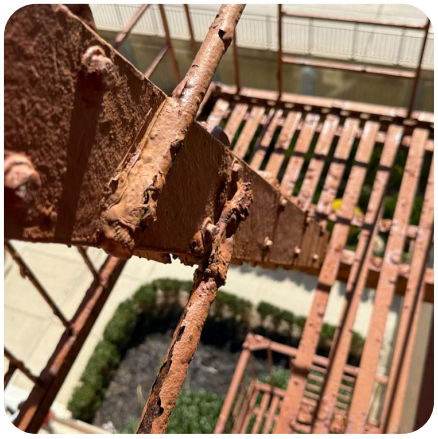


Corroded Stringer connection



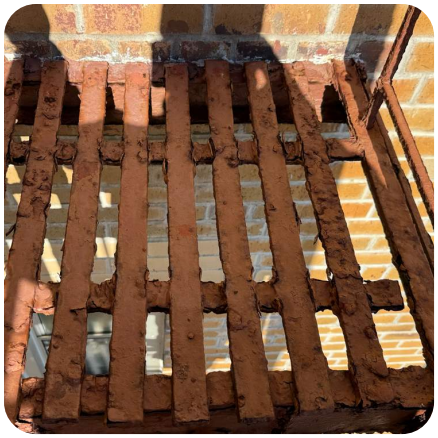
Corroded Railing connection

Corroded Platform slats



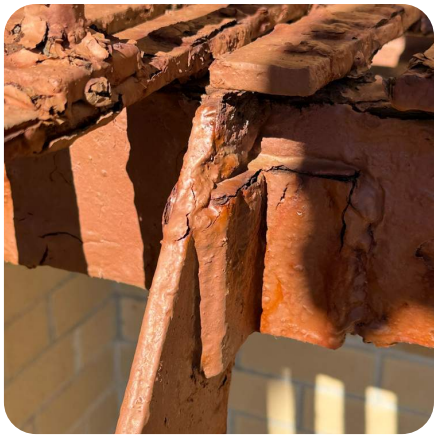
Corroded Railing connection

detached and missing bolts



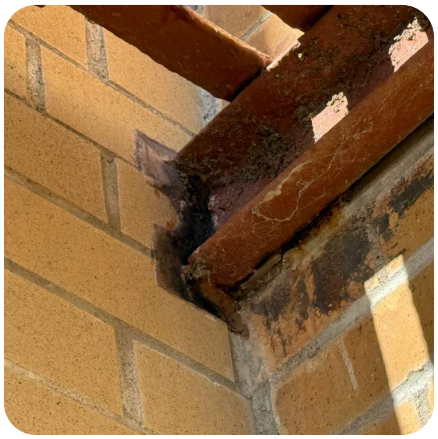
Corroded Platform slats

Corroded Stringer connection



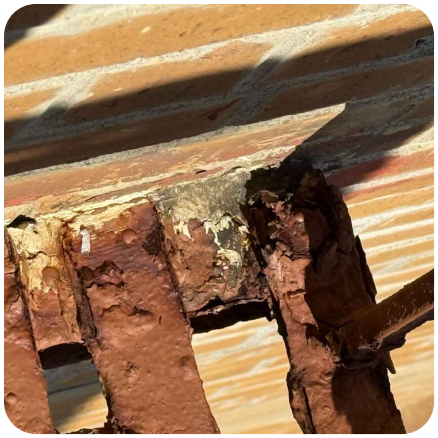
Corroded Stringer connection

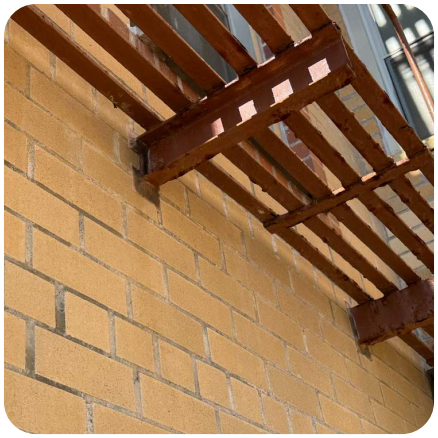
Corroded Tread clip

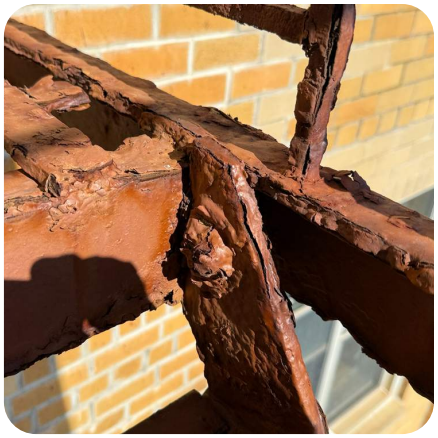


Corroded Support connection

Corroded Railing connection


Corroded Platform slats


Fair and functional supports, ready for load testing


Corroded Stringer connection

Components Overview:

1. Structural Summary

Overall Condition:

The fire escape system is in **generally distressed condition**, exhibiting moderate to advanced corrosion throughout multiple components, including platforms, railings, and treads. While the primary structural framing appears largely intact and capable of rehabilitation, numerous secondary elements show section loss, failed welds, and internal rust, presenting **imminent safety hazards** if left unaddressed. The system requires comprehensive cleaning, mechanical reinforcement, hardware replacement, and protective recoating before it can be deemed suitable for certification or load testing.

Supports & Cement:

Embedded C-channel supports are cantilevered into the masonry façade. They appear structurally functional and in fair condition, suitable for load testing. However, several show corrosion and section loss. Where deterioration is observed, sister reinforcement plates or C-channels should be epoxy-anchored into the wall to restore capacity. All embedments should be sealed with a compatible joint sealant to prevent continued moisture intrusion.

Platforms:

Platforms consist of flat-bar slats spanning between C-channels with secondary slat reinforcement below. The assemblies are in a distressed condition, exhibiting internal and surface corrosion with blistering throughout. Reinforcement with new **bolted mechanical connections** is strongly recommended, particularly at locations where welded joints are

most compromised.

Rails:

Guardrails exhibit widespread corrosion, including rust-jacking at gusset plate connections and coating failure throughout. This presents an **imminent safety hazard** if left unaddressed. Bolted joints show advanced fastener corrosion and internal rust. All railing connections should be disassembled, cleaned, and resecured with new hardware. Openings within the stair rails are large enough for a child to pass through; to mitigate this hazard, install three to four horizontal ¼" stainless steel safety cables within the openings.

Stringers:

Stringer-to-platform clip connections show active corrosion and rust-jacking. Replace all deteriorated angle clips with new **bolted mechanical fasteners** to restore full structural continuity for the staircases.

Treads:

All treads should be cleaned and evaluated for remaining section thickness. Severely corroded treads exhibiting brittleness or section loss present an **imminent danger** and must be replaced. Salvageable treads may be retained following surface preparation and recoating, but any showing deep pitting or flaking must be replaced. Welded and bolted clip connections are also suspect and should be renewed where internal rust is observed.

Balanced Ladder:

The drop ladder was not deployed during the inspection. The upper release mechanism and support hook display minor internal corrosion but appear intact. The assembly is presumed functional but requires operational testing and full surface preparation with a protective coating system.

2. Paint Summary

Overall the paint **Fail: Full paint** on system required before/after repairs. Recommend to power wash and seal all major joints to prevent water intrusion into structural connections.

Fire Escapes must be maintained/painted every 5–7 years as per manufacturer's recommendation.

3. Code Summary

Our inspector found some code issues related to AHJ (Authority Having Jurisdiction) or PENC (pre-existing non-conforming) requirements for this Fire Escape system:

1. No Egress Lighting

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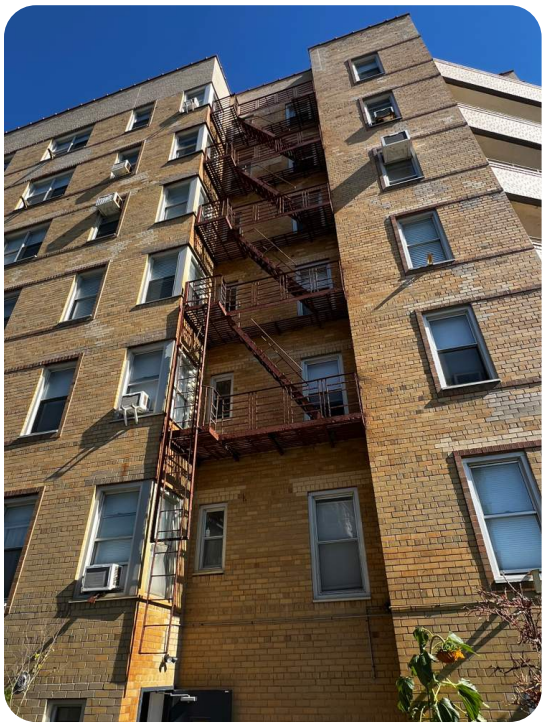


System (B)

is made of painted steel and consists of platforms and stairs with drop ladder to grade.

Results: Fail Major

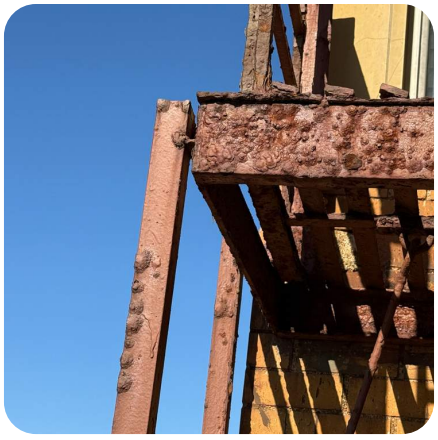
Life Safety Concerns (LSC) & Imminent Safety Hazards (ISH)

Life Safety Concerns on *broken and missing* **treads**

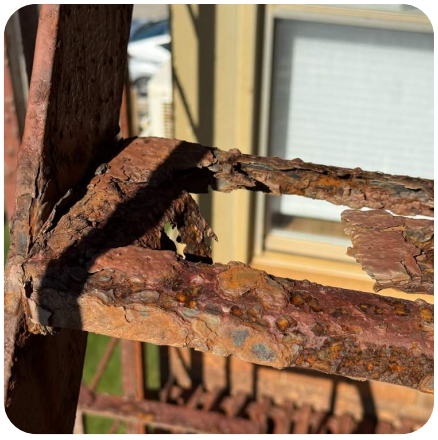
Imminent Safety Hazards on **treads** *with severe material loss*

Supports, stringers, platforms and railings have suspect connections with internal rust, rust jacking, and some material loss.

Severely corroded Treads - Life Safety Concerns & Imminent Safety Hazards



Leg support disconnected due to severe rust jacking - Imminent Safety Hazard

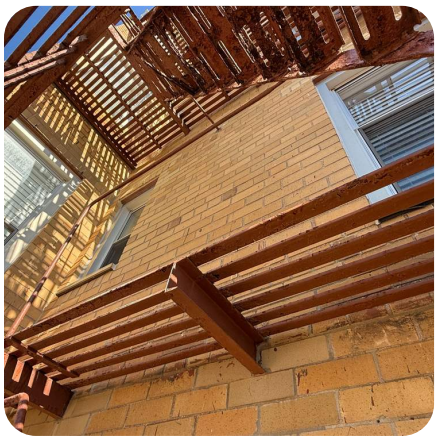


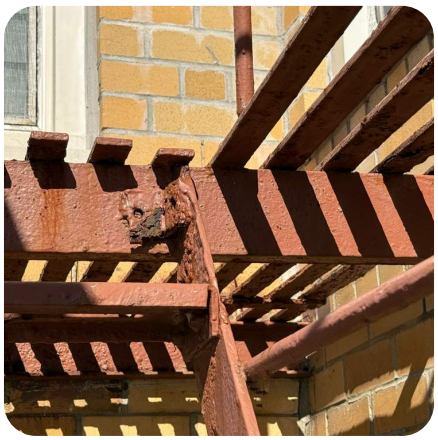
Severely corroded Tread - Life Safety Concern

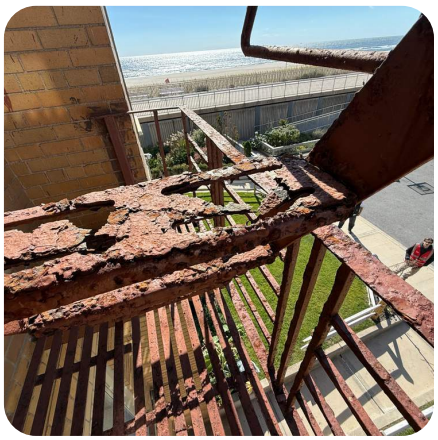
Cement spalling and internal rust

Corroded Platform slats

Corroded Railing connections



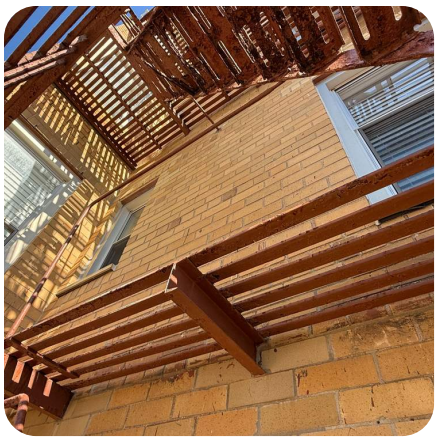




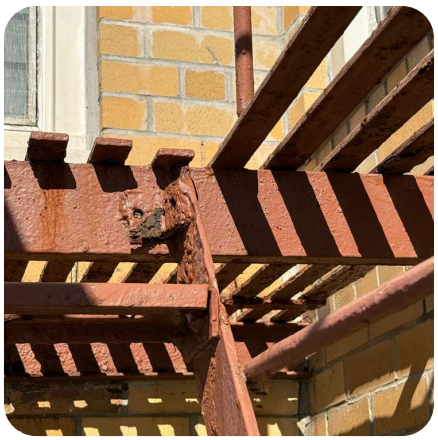
Fair and functional supports, ready for load testing

Corroded Stringer connection

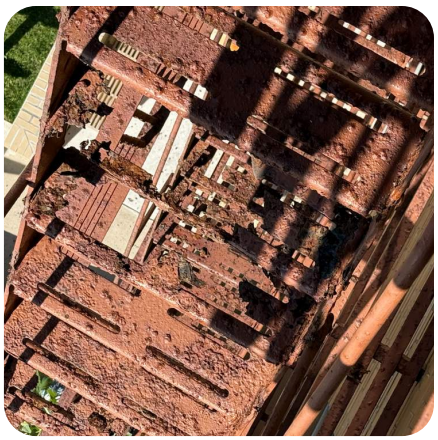
Severely corroded Tread - Life Safety Concern



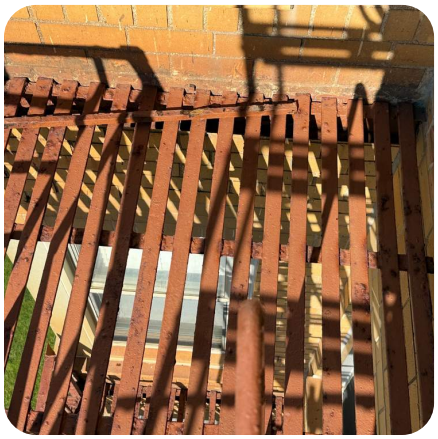
Fair and functional supports, ready for load testing



Corroded Stringer connection

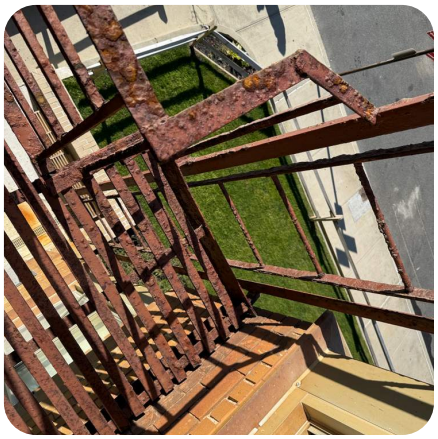


Severely corroded Treads - Life Safety Concern

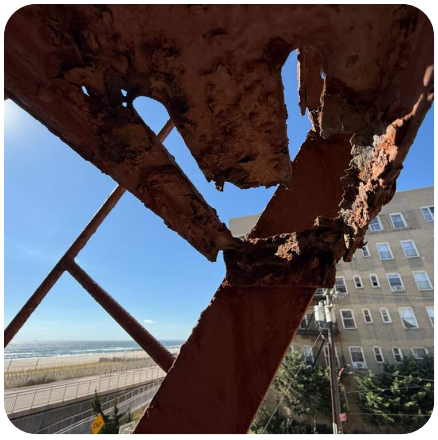


Corroded Platform slats

Corroded Stringer connection



Ladder not tested *PRESUMED* Fair and functional



Severely corroded Tread - Life Safety Concern

Corroded Ladder connections

Corroded stringer, railing & tread connections

1. Structural Summary

Overall Condition:

This fire escape is in **poor and unsafe condition**, exhibiting extensive corrosion, failed welds, and widespread material loss throughout the platforms, treads, and railings. Multiple components have detached or are at risk of detachment, presenting **immediate life-safety hazards** to occupants and responding personnel. While the primary C-channel supports remain largely intact, all secondary elements—including treads, stringers, and rails—require urgent mechanical rehabilitation before the system can be certified or load tested.

Supports & Cement:

Embedded C-channels are cantilevered 8–12 inches into the façade and appear generally sound. However, several embedments exhibit cracking and minor section loss at the wall interface. Seal all cracks and joints to prevent further water infiltration.

Platforms:

Platforms consist of flat-bar slats spanning between C-channels with secondary slat reinforcement below. The assemblies are in a distressed condition, exhibiting internal and surface corrosion with blistering throughout. Reinforcement with new **bolted mechanical connections** is strongly recommended, particularly at locations where welded joints are most compromised.

Rails:

Guardrails display **excessive corrosion** and multiple points of complete failure. Some balusters can be detached by hand, posing an imminent fall hazard to occupants below.

Several welded rail joints have corroded and detached. All railing sections require reinforcement or replacement with bolted connections. Staircase railing openings pose a fall hazard; install **three to four ¼-inch stainless-steel safety cables** within the openings to prevent falls.

Stringers:

The primary stringers are welded directly to the platform and exhibit only minor surface corrosion. However, additional welded angle clips—previously added as reinforcement—show internal rust and rust-jacking. Several of these clips have deteriorated to the point of detachment and, in some cases, were removable by hand. While the main stringer-to-platform welds currently support the staircase, the loss of these reinforcement clips reduces redundancy and long-term stability. All detached or corroded clips should be replaced and secured with **bolted mechanical fasteners** to restore full structural integrity and prevent future separation.

Treads:

Treads are **severely distressed and corroded**, with significant section loss resulting in brittleness that may fail under load, posing **serious life-safety hazards** to building occupants and emergency personnel. Some treads are dislodged and suspended by a single clip connection, while others, though appearing fair, show evidence of internal rust within their joints. All compromised treads must be replaced, and remaining units should be cleaned, inspected, and resecured with new **bolted clip connections** to ensure full structural integrity.

Balanced Ladder:

The drop ladder was not deployed during the inspection. The upper release mechanism and support hook display minor internal corrosion but appear intact. The assembly is presumed functional but requires operational testing and full surface preparation with a protective coating system.

2. Paint Summary

Overall the paint **Fail: Full paint** on system required before/after repairs. Recommend to power wash and seal all major joints to prevent water intrusion into structural connections.

Fire Escapes must be maintained/painted every 5–7 years as per manufacturer's recommendation.

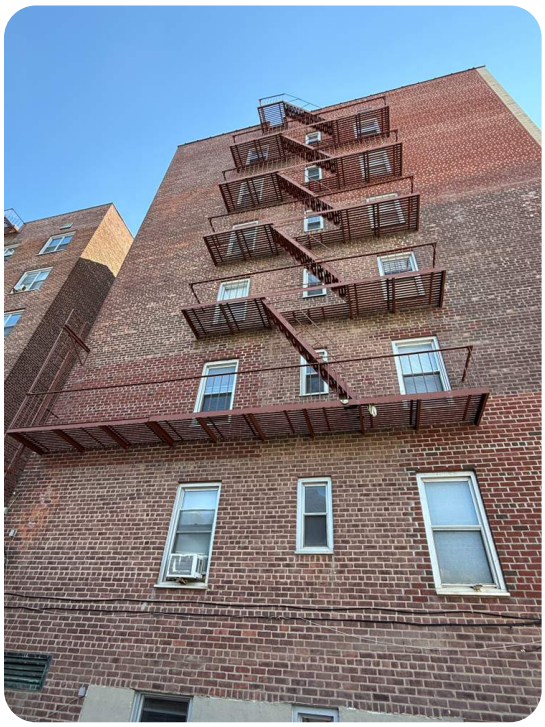
3. Code Summary

Our inspector found some code issues related to AHJ (Authority Having Jurisdiction) or

PENC (pre-existing non-conforming) requirements for this Fire Escape system:

1. No Egress Lighting

IFC 1104.16.7 Maintenance. (PAINT REQUIRED)	**Paint - Fail** • Full Paint Required
IFC 1104.16.5.1 Examination. **IFC 1104.16.5 Materials and strength.** **(LOAD TESTING, OTHER EVIDENCE)**	**Structural - Fail Major with Life Safety Concerns & Imminent Safety Hazards** • Connections suspect with internal rust, rust jacking, and some material loss.
IFC: Means of *egress illumination*. **(CODE)**	**Code - Fail** • No Egress Lighting is Present
January 2010 Standard Specification: Miscellaneous & Ornamental Metals — Fire Escapes (Section 5A.10, Paragraph E)	**NO FIELD WELDING is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted).**
NFPA Life Safety Code 101 7.2.8.6.2	AHJ shall approve certification by Load Test or Other Evidence of Strength

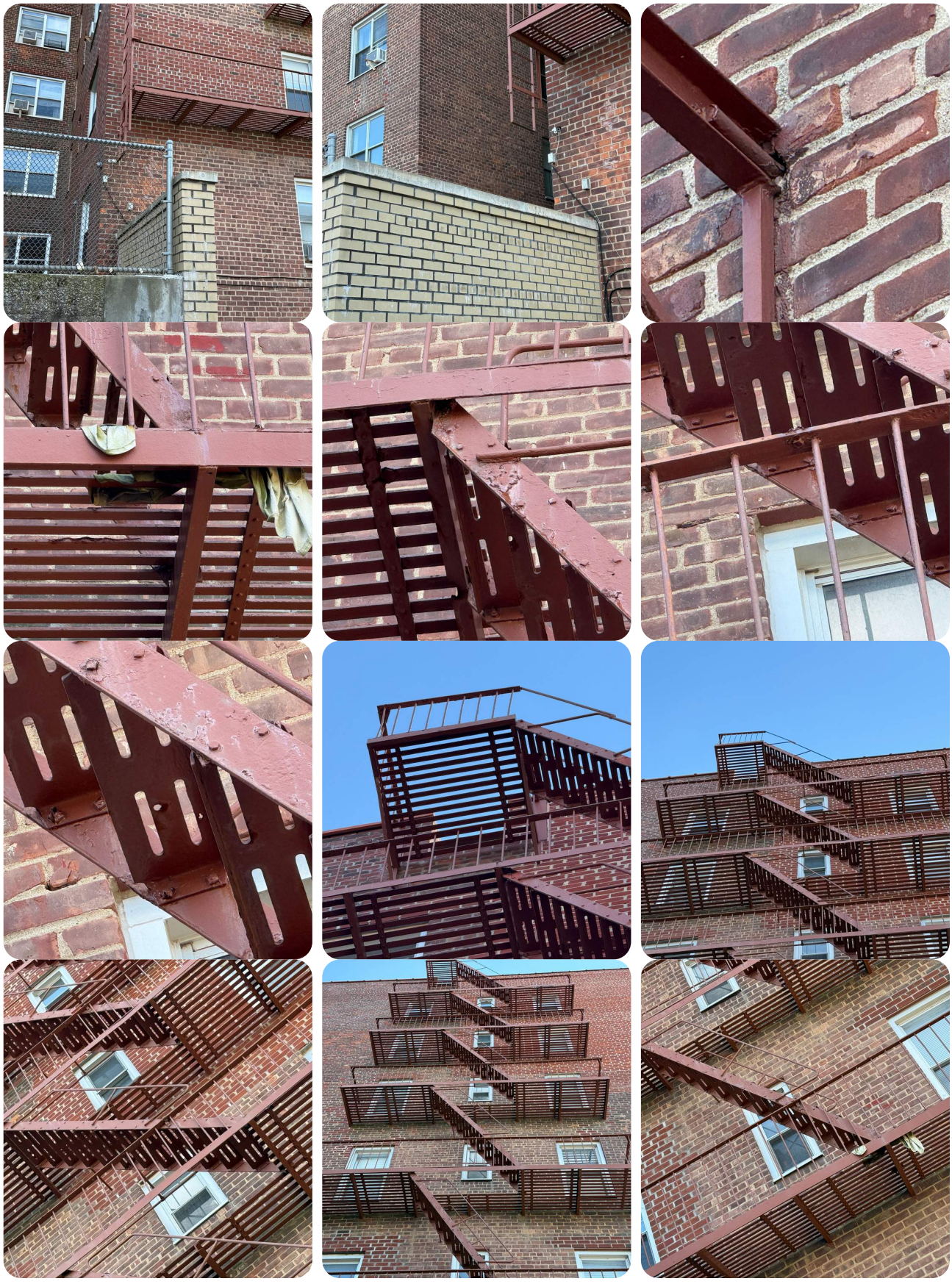


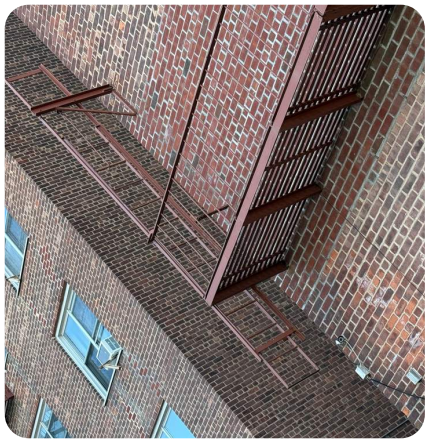
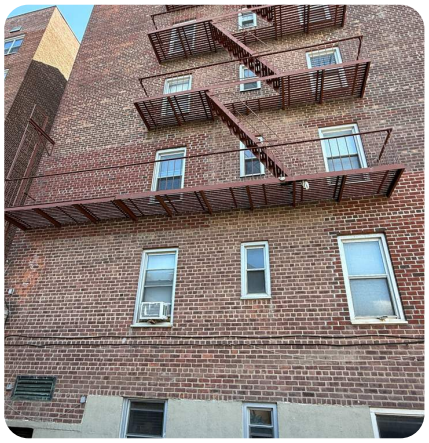
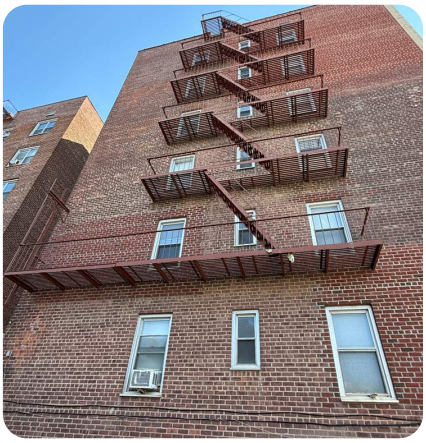
System (C1)

is made of painted steel and consists of platforms and stairs with drop ladder to grade.

Results: Ready for Load Test with Deficiency Report

Observed from ground level, the system appears in **fair and functional condition** with moderate surface corrosion and localized minor rust-jacking in contrast to the other front-facing systems due to reduced weather exposure. The structure is presumed serviceable pending close-up verification and load testing.



Components Overview:

Overall Condition

Observed from ground level, the system appears in **fair condition** with moderate surface corrosion and localized minor rust-jacking in contrast to the other front-facing systems due to reduced weather exposure. The structure is presumed serviceable pending close-up verification and load testing.

Supports & Cement

Embedded C-channel supports have minor corrosion but overall appear fair and functional, suitable for load testing. Seal all embedments to prevent moisture intrusion.

Platforms

Platforms are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible.

Rails

Rails are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible. Openings within the stair rails are large enough for a child to pass through; to mitigate this hazard, install three to four horizontal ¼" stainless steel safety cables within the openings.

Stringers

Stringers are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible.

Treads

Treads are presumed fair and functional, suitable for load testing. Treads are likely experiencing moderate corrosion and partial rust-jacking at top clip connections which we presume due to lack of routine maintenance across systems.

Balanced Ladder

The drop ladder was not deployed during the inspection. The upper release mechanism and support hook display minor internal corrosion but appear intact. The assembly is presumed functional but requires operational testing and full surface preparation with a protective coating system.

2. Paint Summary

Overall the paint **Fail: Spot paint** on system required before/after repairs. Recommend to power wash and seal all major joints to prevent water intrusion into structural connections.

Fire Escapes must be maintained/painted every 5–7 years as per manufacturer's recommendation.

3. Code Summary

Our inspector found some code issues related to AHJ (Authority Having Jurisdiction) or PENC (pre-existing non-conforming) requirements for this Fire Escape system:

1. No Egress Lighting

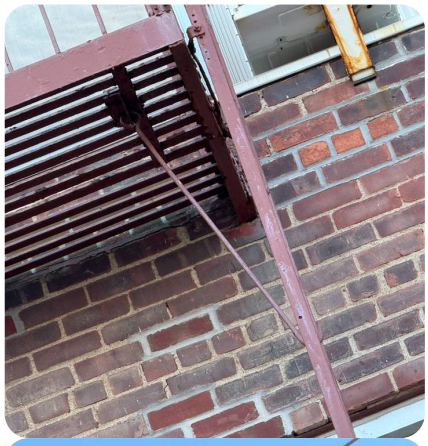
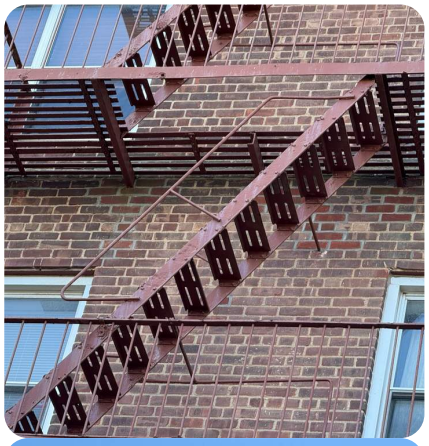
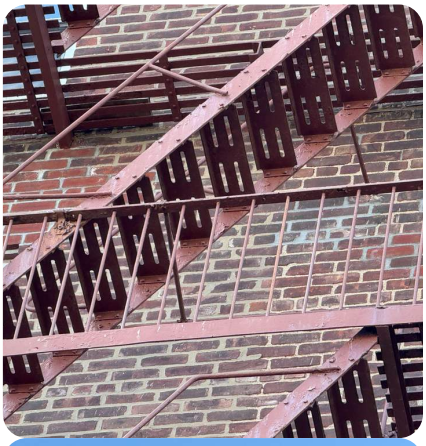
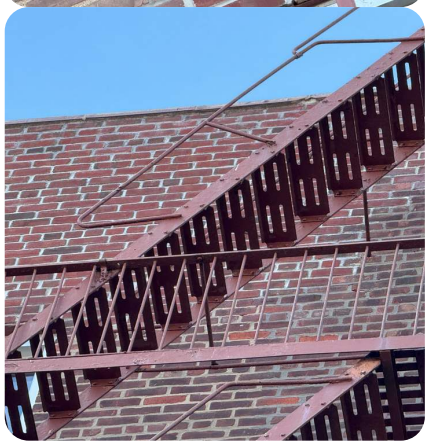
IFC 1104.16.7 Maintenance. (PAINT REQUIRED)	**Paint - Fail** • Spot Paint Required
IFC 1104.16.5.1 Examination. **IFC 1104.16.5 Materials and strength.** **(LOAD TESTING, OTHER EVIDENCE)**	**Structural - Ready for Load Testing with Deficiency Report.** • Presumed fair and functional, ready for load testing. Due to lack of routine maintenance connections suspect with internal rust.
IFC: Means of *egress illumination.* **(CODE)**	**Code - Fail** • No Egress Lighting is Present
January 2010 Standard Specification: Miscellaneous & Ornamental Metals — Fire Escapes (Section 5A.10, Paragraph E)	**NO FIELD WELDING is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted).**
NFPA Life Safety Code 101 7.2.8.6.2	AHJ shall approve certification by Load Test or Other Evidence of Strength

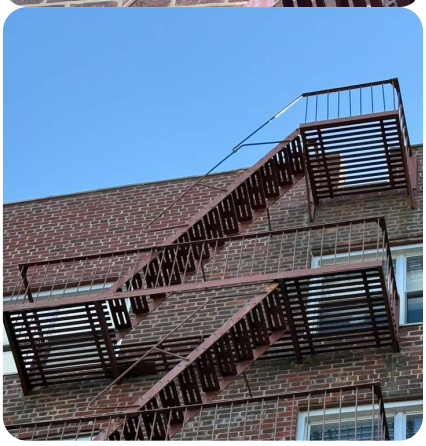
System (C2)

is made of painted steel and consists of platforms and stairs with drop ladder to grade.

Results: Ready for Load Test with Deficiency Report

Observed from ground level, the system appears in **fair and functional condition** with moderate surface corrosion and localized minor rust-jacking in contrast to the other front-facing systems due to reduced weather exposure. The structure is presumed serviceable pending close-up verification and load testing.



Components Overview:

Overall Condition

Observed from ground level, the system appears in **fair condition** with moderate surface corrosion and localized minor rust-jacking in contrast to the other front-facing systems due to reduced weather exposure. The structure is presumed serviceable pending close-up verification and load testing.

Supports & Cement

Embedded C-channel supports have minor corrosion but overall appear fair and functional, suitable for load testing. Seal all embedments to prevent moisture intrusion.

Platforms

Platforms are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible.

Rails

Rails are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible. Openings within the stair rails are large enough for a child to pass through; to mitigate this hazard, install three to four horizontal ¼" stainless steel safety cables within the openings.

Stringers

Stringers are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible.

Treads

Treads are presumed fair and functional, suitable for load testing. Treads are likely experiencing moderate corrosion and partial rust-jacking at top clip connections which we presume due to lack of routine maintenance across systems.

Balanced Ladder

The drop ladder was not deployed during the inspection. The upper release mechanism and support hook display minor internal corrosion but appear intact. The assembly is presumed functional but requires operational testing and full surface preparation with a protective coating system.

2. Paint Summary

Overall the paint **Fail: Spot paint** on system required before/after repairs. Recommend to power wash and seal all major joints to prevent water intrusion into structural connections.

Fire Escapes must be maintained/painted every 5–7 years as per manufacturer's recommendation.

3. Code Summary

Our inspector found some code issues related to AHJ (Authority Having Jurisdiction) or PENC (pre-existing non-conforming) requirements for this Fire Escape system:

1. No Egress Lighting

IFC 1104.16.7 Maintenance. (PAINT REQUIRED)	**Paint - Fail** • Spot Paint Required
IFC 1104.16.5.1 Examination. **IFC 1104.16.5 Materials and strength.** **(LOAD TESTING, OTHER EVIDENCE)**	**Structural - Ready for Load Testing with Deficiency Report.** • Presumed fair and functional, ready for load testing. Due to lack of routine maintenance connections suspect with internal rust.
IFC: Means of *egress illumination*.	**Code - Fail** • No Egress Lighting is Present

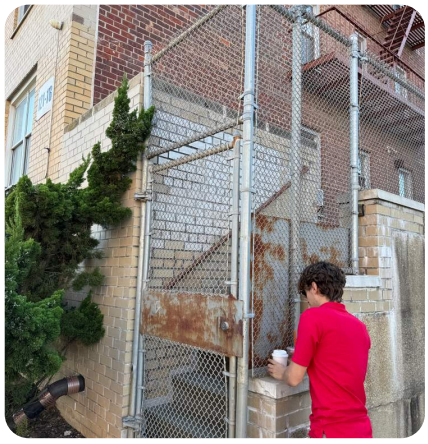
(CODE)	
January 2010 Standard Specification: Miscellaneous & Ornamental Metals — Fire Escapes (Section 5A.10, Paragraph E)	**NO FIELD WELDING is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted).**
NFPA Life Safety Code 101 7.2.8.6.2	AHJ shall approve certification by Load Test or Other Evidence of Strength

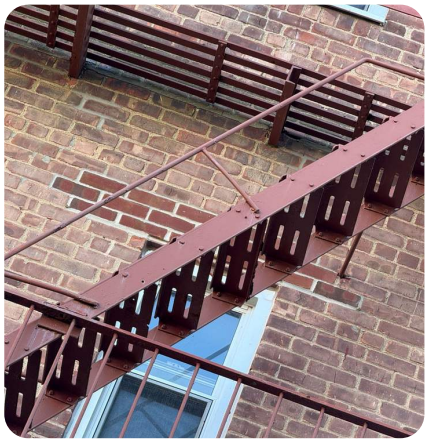
System (C3)

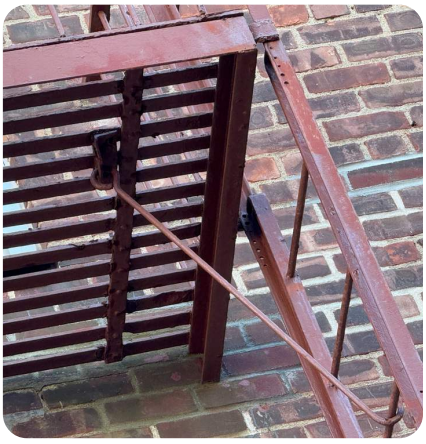
is made of painted steel and consists of platforms and stairs with drop ladder to grade.

Results: Ready for Load Test with Deficiency Report

Observed from ground level, the system appears in **fair and functional condition** with moderate surface corrosion and localized minor rust-jacking in contrast to the other front-facing systems due to reduced weather exposure. The structure is presumed serviceable pending close-up verification and load testing.







Components Overview:

Overall Condition

Observed from ground level, the system appears in **fair condition** with moderate surface corrosion and localized minor rust-jacking in contrast to the other front-facing systems due to reduced weather exposure. The structure is presumed serviceable pending close-up verification and load testing.

Supports & Cement

Embedded C-channel supports have minor corrosion but overall appear fair and functional, suitable for load testing. Seal all embedments to prevent moisture intrusion.

Platforms

Platforms are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible.

Rails

Rails are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible. Openings within the stair rails are large enough for a child to pass through; to mitigate this hazard, install three to four horizontal ¼" stainless steel safety cables within the openings.

Stringers

Stringers are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible.

Treads

Treads are presumed fair and functional, suitable for load testing. Treads are likely experiencing moderate corrosion and partial rust-jacking at top clip connections which we presume due to lack of routine maintenance across systems.

Balanced Ladder

The drop ladder was not deployed during the inspection. The upper release mechanism and support hook display minor internal corrosion but appear intact. The assembly is presumed functional but requires operational testing and full surface preparation with a protective coating system.

2. Paint Summary

Overall the paint **Fail: Spot paint** on system required before/after repairs. Recommend to power wash and seal all major joints to prevent water intrusion into structural connections.

Fire Escapes must be maintained/painted every 5–7 years as per manufacturer's

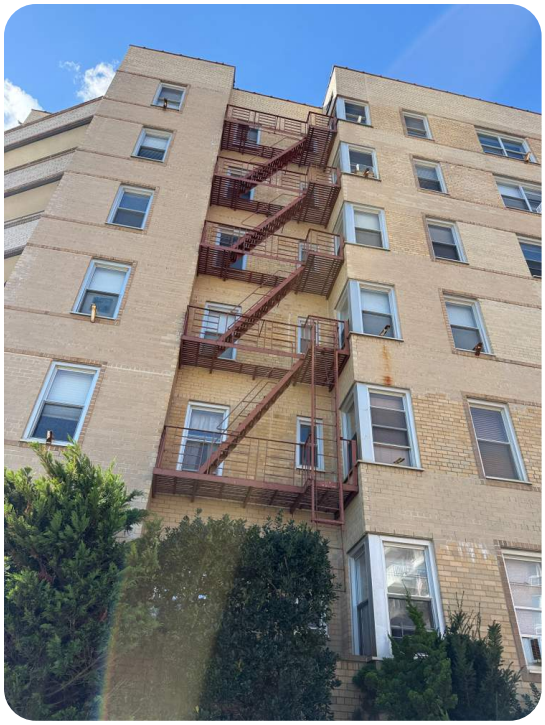
recommendation.

3. Code Summary

Our inspector found some code issues related to AHJ (Authority Having Jurisdiction) or PENC (pre-existing non-conforming) requirements for this Fire Escape system:

1. No Egress Lighting

IFC 1104.16.7 Maintenance. (PAINT REQUIRED)	**Paint - Fail** • Spot Paint Required
IFC 1104.16.5.1 Examination. **IFC 1104.16.5 Materials and strength.** **(LOAD TESTING, OTHER EVIDENCE)**	**Structural - Ready for Load Testing with Deficiency Report.** • Presumed fair and functional, ready for load testing. Due to lack of routine maintenance connections suspect with internal rust.
IFC: Means of *egress illumination*. **(CODE)**	**Code - Fail** • No Egress Lighting is Present
January 2010 Standard Specification: Miscellaneous & Ornamental Metals — Fire Escapes (Section 5A.10, Paragraph E)	**NO FIELD WELDING is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted).**
NFPA Life Safety Code 101 7.2.8.6.2	AHJ shall approve certification by Load Test or Other Evidence of Strength



System (D)

is made of painted steel and consists of platforms and stairs with drop ladder to grade.

Results: Ready for Load Test with Deficiency Report

Observed from ground level, the system appears in **fair and functional condition** with moderate surface corrosion and localized minor rust-jacking in contrast to the other front-facing systems due to reduced weather exposure. The structure is presumed serviceable pending close-up verification and load testing.

Components Overview:

Overall Condition

Observed from ground level, the system appears in **fair condition** with moderate surface corrosion and localized minor rust-jacking in contrast to the other front-facing systems due to reduced weather exposure. The structure is presumed serviceable pending close-up verification and load testing.

Supports & Cement

Embedded C-channel supports have minor corrosion but overall appear fair and functional, suitable for load testing. Seal all embedments to prevent moisture intrusion.

Platforms

Platforms are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible.

Rails

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Stringers

Stringers are presumed fair and functional, showing minor surface corrosion. Spot priming and coating are recommended where surface rust is visible.

Treads

Treads are presumed fair and functional, suitable for load testing. Treads are likely experiencing moderate corrosion and partial rust-jacking at top clip connections which we presume due to lack of routine maintenance across systems.

Balanced Ladder

The drop ladder was not deployed during the inspection. The upper release mechanism and support hook display minor internal corrosion but appear intact. The assembly is presumed functional but requires operational testing and full surface preparation with a protective coating system.

2. Paint Summary

Overall the paint **Fail: Spot paint** on system required before/after repairs. Recommend to power wash and seal all major joints to prevent water intrusion into structural connections.

Fire Escapes must be maintained/painted every 5–7 years as per manufacturer's recommendation.

3. Code Summary

Our inspector found some code issues related to AHJ (Authority Having Jurisdiction) or PENC (pre-existing non-conforming) requirements for this Fire Escape system:

1. No Egress Lighting

IFC 1104.16.7 Maintenance. (PAINT REQUIRED)	**Paint - Fail** • Spot Paint Required
IFC 1104.16.5.1 Examination. **IFC 1104.16.5 Materials and strength.** **(LOAD TESTING, OTHER EVIDENCE)**	**Structural - Ready for Load Testing with Deficiency Report.** • Presumed fair and functional, ready for load testing. Due to lack of routine maintenance connections suspect with internal rust.
IFC: Means of *egress illumination*.	**Code - Fail** • No Egress Lighting is Present

(CODE)	
January 2010 Standard Specification: Miscellaneous & Ornamental Metals — Fire Escapes (Section 5A.10, Paragraph E)	**NO FIELD WELDING is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted).**
NFPA Life Safety Code 101 7.2.8.6.2	AHJ shall approve certification by Load Test or Other Evidence of Strength

Applicable Codes

IFC 1104.16.5 Materials and strength.

Components of fire escape stairways shall be constructed of noncombustible materials. Fire escape stairways and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.78 kN/m^2). Fire escape stairways and balconies shall be provided with a top and intermediate handrail on each side.

IFC 1104.16.5.1 Examination.

Fire escape stairways and balconies shall be examined for structural adequacy and safety in accordance with Section 1104.16.5 **by a registered design professional or others acceptable to the fire code official** every 5 years, or as required by the fire code official. An inspection report shall be submitted to the fire code official after such examination.

IFC 1104.16.7 Maintenance.

Fire escape stairways shall be kept clear and unobstructed at all times and shall be maintained in good working order.

IFC - Illumination required.

The means of egress serving a room or space shall be illuminated at all times that the room or space is occupied.

NFPA Life Safety Code 101 7.2.8.6.2

The Authority Having Jurisdiction (AHJ) shall approve any fire escape by Load Test or Certification (other evidence of strength).

Pre-Load Test Evaluation - Explained

IFC 1104.16.5.1 Examination: *Fire escape* stairways and balconies shall be examined..... **An inspection report shall be submitted to the *fire code official* after such examination.**

Thank you for allowing us to perform an initial evaluation of your fire escape system. At this stage, our assessment was conducted either entirely from the ground or during a brief, complimentary visual walk through. In such cases, our inspection is *limited in scope* and relies heavily on binoculars, zoom lenses, and visual clues from accessible vantage points.

Because most structural issues—especially corrosion—occur at the *top of connections* or behind face-mounted hardware, ground-level evaluations often cannot confirm the condition of these critical areas. **This type of assessment is classified as a "Pre-Load Test Evaluation,"** which means it's designed to identify potential issues, but not to determine precise quantities, exact locations, or whether specific components can be certified for a load test at this time.

When we do gain physical access—either by ladder, stair, or platform—we can supplement our visual findings with a short video walkthrough (typically 5–10 minutes) that includes finger-pointed commentary highlighting which elements appear ready for load testing and which require further investigation or immediate repair. Still, even these faster, free-access walk-throughs remain preliminary in nature and do not substitute for a **full, paid evaluation** where every connection is systematically examined, documented, and photographed from all angles.

If you would like a more complete report suitable for vendor pricing, budgeting, or certification purposes, one of the following will be required:

1. **Hire Our Team for a Full Evaluation** – This includes time on the system, detailed photography, mapping, and formal reporting.
2. **Use One of Our Network Repair Vendors** – We'll contact our list of qualified vendors who can physically access the system and relay critical information back to us for final review and report completion.
3. **Coordinate Access with Your Own Trusted Repair Mechanic** – They must be capable of documenting on-system conditions so we can issue a load test certification, repair scope, or engineering findings.

We appreciate the opportunity to support your compliance journey and will guide you through the next steps needed to bring your fire escape system into full certification.

Conclusion & Next Steps

Please let us know whether you intend to proceed as a **Do-It-Yourself (DIY)** client or if you would like to engage our team under the **Vendor Management Oversight (VMO)** program. Both options require coordination with your local authority (AHJ – Authority Having Jurisdiction) and thorough documentation to ensure your fire escape system meets certification standards.

1. **Identify a Responsible Party, Design Professional or Others Acceptable to AHJ.**
2. **Create Construction Control Document / Inspection Report. To determine if permit is required or not, by the Building Department.**
3. **Verify that the Repair Vendor is Licensed and Insured to Perform Repairs / Painting.**
4. **Load Test Upon Completion of All Repair Work or Certify via Other Evidence of Strength in lieu of Load Test. Optional: Opinion Affidavit with Disclaimer of Liability.**
5. **Client is Responsible for Identifying Design Professional or Others Acceptable to AHJ Before Any Work is to be Performed other than Emergency Repairs to make Fire Escape Functional until Permanent Repairs are Scheduled.**

Option 1: DIY Path – You Manage the Process

If you plan to manage your own vendors and documentation, you are responsible for complying with all applicable **fire, building, and EPA regulations**. The following steps must be followed:

DIY Compliance Steps

1. Notify the City Official

Contact your local **Fire Marshal or Building Department** and:

- Inform them you've engaged a **design professional** (engineer, architect, or other acceptable party) to inspect and evaluate the fire escape.
- Request clarification on:
  - Whether they treat missing lights as a **pre-existing, nonconforming condition**, or if full **egress illumination** is required.
  - Whether **permits** are needed for restoration/repairs based on the findings.
  - Whether they wish to **witness the inspection**.

2. Inspection & Documentation

- Hire a **licensed engineer, architect, or other AHJ-approved fire escape inspector**.
- Vendors must conduct a **full-system walkthrough**, accessing every platform, tread, and connection.
- All deficiencies must be **documented** and a **repair scope** submitted to the owner and AHJ.

3. Scope Review & Permitting

- A **design professional** must review the repair scope and determine whether permits are required by the AHJ.

4. Designate a Responsible Party

- Notify the city who will **supervise the repair process**, ensuring work is performed in accordance with the approved scope (with or without permits).

5. Repair Restrictions (Lead Paint & EPA Compliance)

- **Welding is strictly prohibited** on fire escapes built before 1978.
- **No field welding** is permitted under any circumstances.
- Repairs must be **bolted** or **shop welded and field-bolted**.
- Violations may result in **EPA fines exceeding $37,500**.

Option 2: VMO Path – We Manage the Process for You

If you prefer a fully managed solution, our **Vendor Management Oversight (VMO)** program provides professional oversight, technical guidance, and final certification support.

What's Included in VMO:

- **Initial Evaluation Report & Photo-Video-Technical Repair Report**
  - One-page summary indicating **Pass**, **Fail**, or **Imminent Danger**
  - Includes ground or physical findings, photos, and optional video
- **AHJ Communication & Coordination**
  - We notify the city and clarify inspection witness needs, lighting requirements, and permit conditions
- **Daily Vendor Oversight**
  - We review daily photos/videos from your vendor

  - Ensure repairs follow approved methods and meet IFC and IBC codes
  - Prevents illegal welding; ensures proper bolting and documentation
- **Inspection Video Summary**
  - Narrated walkthrough highlighting deficiencies and identifying components ready for load testing
- **Final Report & Certification**
  - 25-point confidence checklist with repair recommendations/requirements
  - Photographs and final walkthrough video by our inspector
  - Certification issued via **Load Test** or **Other Evidence of Strength**
- **Password-Protected Webpage**
  - Central hub for documentation such as: inspection report, inspection video(s), inspection photos
  - Easily shareable with AHJ, owner, property managers, and agents

Request for Proposal (RFP) Options. (Fees to be paid by owner/agent or vendor)

Following this initial inspection, the property owner has the option to either proceed as a **Do-It-Yourself (DIY) client**—managing their own outreach to local vendors—or enroll in our **Vendor Management Oversight (VMO)** or **Project Management Oversight (PMO)** programs, where we coordinate the process on your behalf. Regardless of your selection, all projects remain eligible for RFP distribution.

- **For DIY clients**, it's your responsibility to invite vendors to the property and provide access so they can walk through the fire escape system and prepare their own scope and quote. (We can provide additional information to your repair vendor at additional cost.)
  - **Most vendors only provide 1 year warranty on work performed.**
- **For clients utilizing our VMO/PMO service**, we simplify this process by issuing a detailed RFP package to our pre-screened vendor network. These vendors review our inspection photos, summary findings, and any available site data—allowing them to submit accurate preliminary bids **without needing to visit the site**, unless shortlisted. This minimizes disruptions and ensures that only cost-aligned, code-qualified bids

move forward.

- **We provide a 15-25 year warranty on all work performed.**
- **25 year warranty provided with Corrosion Protection Plan.**
- **Network partners / repair mechanics: 5-15 year warranties under VMO/PMO.**

Load Testing Considerations

- If recent **structural bolting** has been completed, a **partial/integrated load test** may apply.
- Otherwise, a **full load test** is required unless waived by other evidence of strength (as determined by a design professional or others acceptable to the AHJ).

Temporary Certifications (If Applicable)

- If the fire escape is scheduled for **removal or replacement within 5 years**, a **temporary 5-year certification** may be available, but **still requires load testing**

Why Load Testing Your Fire Escape Is the Smartest Choice Right Now

Load testing is the **only way to fully remove liability** from you, your insurance carrier, and the city. Here's why:
• **Opinion affidavits come with disclaimers** that cities often won't sign off on — and insurance companies won't want you to sign either, because it puts all the legal risk on them (and you).
• **Load testing is definitive**: it proves your 75–125+ year-old fire escape can handle emergency use — no guesswork, no disclaimers.
• It's **100% code-compliant**, **certified**, and good for up to 5–25 years depending on the city and scope.
• It also protects your tenants and your building's value — like testing a sprinkler system or elevator.

Bottom line: Load testing clears your liability, satisfies the city, and keeps your insurance coverage secure.

🔥 Fire Escape Financing - Powered by Fire Escape Services Network

Need critical fire escape repairs, inspections, or certifications—but want to spread out the cost? Our **Fire Escape Financing** program offers flexible, interest-free payment plans that make safety upgrades more accessible than ever.

✔️ **What We Offer:**
- **0% Interest Financing** (3–6 months standard)
- **12-Month Interest-Free Extension** for qualifying projects over $50,000
- **No credit check required**
- Available for **inspections, repairs, drawings, load testing, and full project oversight**
- Financing is available across all **FESN brands and services**

🏡 **Who Qualifies:**
- Property owner must sign the agreement
- Project must be directly managed by FESN **or an approved vendor from our network**
- In special cases, even **client-selected vendors** can participate—if they agree to our financing terms

💡 **Extended Financing:** Need longer than 12 months?
We also offer **1–15 year financing options (with interest)** through an **affiliated third-party loan provider** for **residential properties only**.

⚠️ **Important Notes:**
- **No warranties or certifications** will be released until full payment is received
- All financing agreements include lien protections and binding arbitration clauses
- Legal homeowner signature is required to proceed

🔎 **Ready to Get Started?**
Whether you're working with our team or a vendor you trust, we can help finance your fire escape project—with transparency, flexibility, and legal protection for everyone involved.

More information available upon request.
Just ask your project coordinator or contact us directly to activate **Fire Escape Financing** today.

WELDING PROHIBITED FOR RESTORATION/REPAIRS ON FIRE ESCAPES

Fire Escape Repair & Lead-Hazard Compliance Policy

1. Structural Repair Policy: No Field Welding on Bolted or Riveted Fire Escapes

🛠️ Key Code Provision — January 2010 Standard Specification: Miscellaneous & Ornamental Metals — Fire Escapes (Section 5A.10, Paragraph E):

"NO FIELD WELDING is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted)."

• **"Field welding"** refers to any welding performed on-site, as opposed to factory or shop welding.
• **Shop welding** (completed off-site under controlled conditions) is permitted **only if original design or prefabrication allows for welding**.
• **Bolt or rivet-type fasteners** must be replaced in kind—matching original hardware type and method.

2. EPA Lead-Based Paint Compliance (Pre-1978 Structures)

Under the **EPA Renovation, Repair and Painting (RRP) Rule**, work on residential or child-occupied buildings built **before 1978** often involves lead-based paint. Welding that disturbs painted surfaces is subject to strict regulation.
• **Welding is effectively prohibited** on such components unless:
• An **EPA-certified renovator or firm** oversees the work, and
• **Lead-safe work practices** are fully implemented (containment, HEPA vacuums, disposable protective gear, etc.).
• **Violations** can result in civil penalties up to **$37,500 per violation, per day** for non-compliance with EPA RRP Rule provisions regarding lead hazard disturbance.

3. Combined Table: Welding & Lead-Hazard Prohibition

Condition	Field Welding Allowed?	EPA RRP-Compliant on Pre-1978 Structure?

Fire escape originally fastened with bolts or rivets	No — prohibited by 2010 code	No — welding disturbs lead paint
Shop welding precise fittings or new prefabricated parts	Yes — If performed off-site under control	Only if conducted under EPA certified RRP
Bolt or rivet replacement / mechanical fasteners	Yes — required repair method	Yes — with lead-safe protocols

4. Recommended Compliance Actions

1. **Confirm the era** of the structure—pre-1978 implies high likelihood of lead-based paint.
2. **Avoid any field welding** on fire escapes originally assembled with bolts or rivets.
3. **Use mechanical fastening** (bolts/rivets) and ensure replacement matches original methodology.
4. If welding is necessary for prefabricated components:
• Ensure welding is done in a **shop setting**, not on-site.
• For pre-1978 buildings, all surface-prep and welding work must follow **EPA RRP certified protocols**.
5. Engage a **licensed structural engineer** and a **certified RRP renovator or firm** before undertaking repairs.

5. Legal Reference Summary

• **"No field welding is permitted in the repair of fire escapes. All repairs must be bolted or shop welded (then field bolted)."** — Standard Specification 5A.10 (Miscellaneous & Ornamental Metals), January 2010
• **EPA RRP Rule enforcement** (1978-era structures): fines up to **$37,500/day per violation** for unauthorized disturbance of lead-based painted surfaces.

Whether you choose to manage the process independently or allow us to guide you through it, we ensure you have the tools and documentation to solicit and compare bids confidently—or, if you prefer, you can bypass the bid process entirely and engage our certified team based on trust, warranty, and proven experience.